

January 22nd, 2020

Regional Administrator
Air and Radiation Division
C/O Kathleen D'Agostino
US EPA, Region 5 (A-18J)
77 West Jackson Boulevard
Chicago, IL 60604
dagostino.kathleen@epa.gov

**Re: Hibbing Taconite Company
Semiannual Compliance Report
40 CFR 53.1235(e)(5) Regional Haze Compliance Report
Report Period: July 1 – December 31, 2019**

To Whom it May Concern:

Hibbing Taconite Company (HTC) is subject to the *Revision to 2013 Taconite Federal Implementation Plan Establishing BART for Taconite Plants* (FIP) of 40 CFR 52.1235 as published in the Federal Register on April 12, 2016. The final rule came into effect on May 12, 2016. Per this rule, HTC is required to submit a compliance report on a semiannual basis. The potential deviations and downtime noted herein are not necessarily violations of the applicable requirements. The facility preserves the right to use credible evidence to demonstrate compliance with all applicable requirements applicable during this reporting period. Appendix A contains a complete list of the process units, control devices, and CEMS covered by the compliance report. Appendix B is the Semiannual Compliance Report.

Indurating Line and Control Equipment Reporting

HTC operates three indurating furnaces - Furnace Line 1 (EU020), Furnace Line 2 (EU021), and Furnace Line 3 (EU022). During the reporting period, HTC did not have an emission limit in effect for NO_x. The emission limit of 347.4 lbs of SO₂/hr became effective on April 11, 2018. During this reporting timeframe, HTC did not have NO_x reduction control technology fully installed and operational on one of the three furnace lines. Each furnace line is controlled by four wet scrubbers. These scrubbers control particulate emissions from the furnace lines and are also considered low efficiency SO₂ control. During the reporting period there were no SSM events related to the process scrubbers. Furnace startup, shutdown, and malfunction events for this reporting period are listed within this report.

CEMS Reporting

Monitor downtime or malfunctions within the applicable reporting period have been submitted in HTC's Quarterly Excess Emissions and Monitoring System Report. All actions taken within this report were consistent with HTC's SSM plan.

Recordkeeping and Reporting Requirements

Recordkeeping and reporting deviations during the applicable reporting period are listed in the attached report. During this reporting period there were no deviations from the recordkeeping and reporting requirements.

Upon recent review of HTC's CEMS Monitoring Plan, a limited number of CEMS monitor serial numbers were discovered to be misidentified. Previous reports submitted to the agency as part of RATA results, semiannual FIP compliance reports, and excess emissions reports contained these misidentified serial numbers. The corrected serial numbers are listed in Attachment A. The physical monitors have not changed during this timeframe, and the plan has been updated to include the correct serial numbers. This update has no impact on previously reported emissions. All reports submitted to EPA for 4th quarter, 2019 reflect the corrected serial numbers.

Certification

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Sincerely,
Hibbing Taconite Company



Edward LaTendresse
General Manager

Cc: Julie Lucas (Hibbing Taconite Company)
Rich Zavoda (ArcelorMittal)

Attachment A: Equipment Covered by Compliance Report

Furnace Line 1						
Emission Unit (EU)	Stack Vent (SV)	EU Description	CE Description Manufacturer Model	Manufacturer/Model	Emission Analyzed Ranges	Serial Number
020	021	Furnace Line One, Stack 1	Venturi Rod Deck Wet Scrubber Environeering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	225
				Teledyne Monitor Labs T100H	SO ₂ (H)	137
				Sick Maihak FLSE100-H K178 35SHSHS	Stack Flow	Slave: 8398564 Master: 18118323
				Sick Maihak FLSE100-H K178 35SHSHS	Temperature	Slave: 8398564 Master: 18118323
020	022	Furnace Line One, Stack 2	Venturi Rod Deck Wet Scrubber Environeering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	226
				Teledyne Monitor Labs T100H	SO ₂ (H)	136
				Sick Maihak FLSE100-H K178 35SHSHS	Stack Flow	Slave: 11318687 Master: 11318690
				Sick Maihak FLSE100-H K178 35SHSHS	Temperature	Slave: 11318687 Master: 11318690
020	023	Furnace Line One, Stack 3	Venturi Rod Deck Wet Scrubber Environeering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	224
				Teledyne Monitor Labs T100H	SO ₂ (H)	134
				Sick Maihak FLSE100-H K178 35SHSHS	Stack Flow	Slave: 11318679 Master: 11318686
				Sick Maihak FLSE100-H K178 35SHSHS	Temperature	Slave: 11318679 Master: 11318686
020	024	Furnace Line One, Stack 4	Venturi Rod Deck Wet Scrubber Environeering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	215
				Teledyne Monitor Labs T100H	SO ₂ (H)	135
				Sick Maihak FLSE100-H K178 35SHSHS	Stack Flow	Slave: 11168507 Master: 13438339
				Sick Maihak FLSE100-H K178 35SHSHS	Temperature	Slave: 11168507 Master: 13438339

Furnace Line 2						
Emission Unit (EU)	Stack Vent (SV)	EU Description	CE Description Manufacturer Model	Manufacturer/Model	Emission Analyzed Ranges	Serial Number
021	025	Furnace Line Two, Stack 4	Venturi Rod Deck Wet Scrubber Envireneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	199
				Teledyne Monitor Labs T100H	SO ₂ (H)	119
				Sick Maihak FLSE100-H K178 35SHSH	Stack Flow	Slave: 11318689 Master: 11318688
				Sick Maihak FLSE100-H K178 35SHSH	Temperature	Slave: 11318689 Master: 11318688
021	026	Furnace Line Two, Stack 3	Venturi Rod Deck Wet Scrubber Envireneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	197
				Teledyne Monitor Labs T100H	SO ₂ (H)	116
				Sick Maihak FLSE100-H K178 35SHSH	Stack Flow	Slave: 8398565 Master: 11318672
				Sick Maihak FLSE100-H K178 35SHSH	Temperature	Slave: 8398565 Master: 11318672
021	027	Furnace Line Two, Stack 2	Venturi Rod Deck Wet Scrubber Envireneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	179
				Teledyne Monitor Labs T100H	SO ₂ (H)	115
				Sick Maihak FLSE100-H K178 35SHSH	Stack Flow	Slave: 11318691 Master: 11318684
				Sick Maihak FLSE100-H K178 35SHSH	Temperature	Slave: 11318691 Master: 11318684
021	028	Furnace Line Two, Stack 1	Venturi Rod Deck Wet Scrubber Envireneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	198
				Teledyne Monitor Labs T100H	SO ₂ (H)	117
				Sick Maihak FLSE100-H K178 35SHSH	Stack Flow	Slave: 11318673 Master: 11318678
				Sick Maihak FLSE100-H K178 35SHSH	Temperature	Slave: 11318673 Master: 11318678

Furnace Line 3

Emission Unit (EU)	Stack Vent (SV)	EU Description	CE Description Manufacture Model	Manufacturer / Model	Emission Analyzed Ranges	Serial Number
022	029	Furnace Line Three, Stack 1	Venturi Rod Deck Wet Scrubber Envroneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	213
				Teledyne Monitor Labs T100H	SO ₂ (H)	129
				Sick Maihak FLSE100-H K178 35HSHS	Stack Flow	Slave: 11318683 Master: 11318676
				Sick Maihak FLSE100-H K178 35HSHS	Temperature	Slave: 11318683 Master: 11318676
022	030	Furnace Line Three, Stack 2	Venturi Rod Deck Wet Scrubber Envroneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	212
				Teledyne Monitor Labs T100H	SO ₂ (H)	130
				Sick Maihak FLSE100-H K178 35HSHS	Stack Flow	Slave: 11318681 Master: 11318682
				Sick Maihak FLSE100-H K178 35HSHS	Temperature	Slave: 11318681 Master: 11318682
022	031	Furnace Line Three, Stack 3	Venturi Rod Deck Wet Scrubber Envroneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	214
				Teledyne Monitor Labs T100H	SO ₂ (H)	132
				Sick Maihak FLSE100-H K178 35HSHS	Stack Flow	Slave: 11318677 Master: 11318670
				Sick Maihak FLSE100-H K178 35HSHS	Temperature	Slave: 11318677 Master: 11318670
022	032	Furnace Line Three, Stack 4	Venturi Rod Deck Wet Scrubber Envroneering A33-200000	Teledyne Monitor Labs T200M	NO _x (H)	195
				Teledyne Monitor Labs T100H	SO ₂ (H)	131
				Sick Maihak FLSE100-H K178 35HSHS	Stack Flow	Slave: 11318671 Master: 11318680
				Sick Maihak FLSE100-H K178 35HSHS	Temperature	Slave: 11318671 Master: 11318680

**Attachment B: Regional Haze
Semiannual Compliance Report**

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze

Required by 40 CFR 52.1235(e)(5)

Reporting Period: **July 1 - December 31, 2019**

Company: **Hibbing Taconite Company**
4950 County Highway 5 North
PO Box 589
Hibbing, MN 55746-0589

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/1/2019 6:29	7/1/2019 6:32	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/6/2019 16:54	7/6/2019 18:17	83	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/9/2019 14:40	7/9/2019 15:35	55	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/9/2019 15:30	7/9/2019 15:46	16	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/11/2019 0:45	7/11/2019 1:09	24	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/11/2019 1:44	7/11/2019 2:14	30	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/23/2019 0:18	7/23/2019 1:00	42	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/23/2019 4:31	7/23/2019 4:41	10	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/23/2019 16:23	7/23/2019 20:53	270	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/24/2019 14:50	7/25/2019 8:02	1032	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/25/2019 17:36	7/25/2019 17:44	8	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/25/2019 17:59	7/25/2019 18:22	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/25/2019 18:03	7/25/2019 18:28	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/26/2019 10:02	7/26/2019 10:08	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/26/2019 10:37	7/26/2019 11:03	26	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/26/2019 11:17	7/26/2019 14:10	173	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/26/2019 11:18	7/26/2019 13:06	108	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/26/2019 13:37	7/26/2019 14:10	33	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/26/2019 18:51	7/26/2019 19:18	27	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/29/2019 16:07	7/29/2019 16:22	15	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/29/2019 16:07	7/29/2019 16:24	17	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/30/2019 4:38	7/30/2019 4:52	14	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	7/30/2019 4:38	7/30/2019 4:53	15	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/30/2019 14:21	7/30/2019 22:00	459	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/30/2019 14:27	7/30/2019 22:07	460	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/31/2019 0:10	7/31/2019 0:26	16	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/31/2019 0:32	7/31/2019 1:21	49	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/31/2019 4:11	7/31/2019 4:25	14	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/1/2019 19:08	8/1/2019 23:11	243	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/1/2019 19:11	8/1/2019 23:09	238	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	8/3/2019 22:14	8/3/2019 22:20	6	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/5/2019 6:37	8/5/2019 6:51	14	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/13/2019 21:09	8/13/2019 21:35	26	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/13/2019 22:08	8/14/2019 3:46	338	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/14/2019 12:04	8/14/2019 12:05	1	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/14/2019 12:25	8/14/2019 14:32	127	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/15/2019 10:09	8/15/2019 10:15	6	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/20/2019 0:56	8/20/2019 1:13	17	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/20/2019 1:10	8/20/2019 1:26	16	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	8/22/2019 18:59	8/23/2019 14:40	1181	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/22/2019 20:15	8/23/2019 14:04	1069	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/22/2019 22:01	8/25/2019 1:18	3077	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/29/2019 8:58	8/29/2019 9:24	26	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/29/2019 9:40	8/29/2019 9:42	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/1/2019 0:19	9/1/2019 0:40	21	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/1/2019 0:20	9/1/2019 0:41	21	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/1/2019 3:56	9/1/2019 4:37	41	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/6/2019 19:36	9/6/2019 19:39	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/7/2019 4:32	9/7/2019 4:34	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/9/2019 2:30	9/9/2019 2:49	19	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/9/2019 3:22	9/9/2019 3:47	25	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/9/2019 23:33	9/9/2019 23:37	4	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/10/2019 2:45	9/10/2019 2:48	3	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/10/2019 3:23	9/10/2019 3:29	6	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/11/2019 19:31	9/12/2019 15:10	1179	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/11/2019 19:37	9/12/2019 17:30	1313	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/11/2019 19:40	9/12/2019 14:36	1136	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/13/2019 18:50	9/13/2019 19:05	15	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/16/2019 11:33	9/16/2019 11:39	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/16/2019 11:34	9/16/2019 11:59	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/16/2019 11:46	9/16/2019 12:42	56	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/16/2019 12:23	9/16/2019 14:19	116	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/17/2019 8:12	9/17/2019 8:55	43	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/19/2019 19:35	9/19/2019 20:25	50	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/20/2019 12:02	9/20/2019 12:15	13	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	9/20/2019 13:21	9/20/2019 13:33	12	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/21/2019 20:39	9/21/2019 21:13	34	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/21/2019 20:39	9/21/2019 21:06	27	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/24/2019 7:29	9/24/2019 7:31	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/24/2019 7:29	9/24/2019 7:33	4	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/26/2019 15:35	9/26/2019 16:10	35	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/26/2019 15:57	9/26/2019 16:28	31	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/30/2019 8:49	9/30/2019 9:38	49	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/30/2019 9:46	9/30/2019 11:03	77	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/30/2019 11:21	9/30/2019 11:27	6	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/30/2019 11:34	9/30/2019 17:15	341	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/1/2019 7:20	10/1/2019 8:28	68	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/1/2019 7:57	10/1/2019 8:06	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/2/2019 14:02	10/2/2019 14:12	10	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/7/2019 5:18	10/7/2019 5:36	18	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/7/2019 7:05	10/7/2019 7:07	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/7/2019 11:44	10/7/2019 11:55	11	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	10/7/2019 12:35	10/7/2019 13:06	31	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/12/2019 4:57	10/12/2019 5:20	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/12/2019 4:58	10/12/2019 6:11	73	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/15/2019 17:25	10/15/2019 18:57	92	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/17/2019 0:38	10/17/2019 0:45	7	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/18/2019 7:56	10/18/2019 8:39	43	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/21/2019 21:47	10/21/2019 22:14	27	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/21/2019 22:45	10/21/2019 23:07	22	Burner Malfunction	Burner was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/22/2019 0:54	10/22/2019 6:55	361	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	10/22/2019 3:00	10/24/2019 8:13	3193	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/24/2019 8:30	10/24/2019 14:07	337	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/25/2019 13:01	10/25/2019 13:03	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/27/2019 0:33	10/27/2019 0:50	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/27/2019 0:55	10/27/2019 1:29	34	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/28/2019 12:23	10/28/2019 12:31	8	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/28/2019 13:34	10/28/2019 14:56	82	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/29/2019 5:07	10/29/2019 5:17	10	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/29/2019 5:08	10/29/2019 5:11	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	10/30/2019 7:22	10/30/2019 7:37	15	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/31/2019 8:51	10/31/2019 9:02	11	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/31/2019 8:51	10/31/2019 9:04	13	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/31/2019 22:57	10/31/2019 23:24	27	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/31/2019 22:58	10/31/2019 23:08	10	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/1/2019 7:30	11/1/2019 7:34	4	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/4/2019 16:33	11/4/2019 16:40	7	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/4/2019 17:27	11/4/2019 17:57	30	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	11/5/2019 5:04	11/5/2019 5:51	47	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/5/2019 5:05	11/5/2019 5:30	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/5/2019 9:36	11/5/2019 10:06	30	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/5/2019 23:42	11/5/2019 23:57	15	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/7/2019 10:33	11/7/2019 10:39	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/8/2019 7:06	11/8/2019 8:14	68	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/12/2019 4:31	11/12/2019 7:23	172	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/12/2019 4:35	11/12/2019 4:50	15	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	11/12/2019 9:02	11/12/2019 15:49	407	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/14/2019 8:34	11/14/2019 9:18	44	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/14/2019 10:29	11/14/2019 21:00	631	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/22/2019 11:42	11/23/2019 15:17	1655	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/26/2019 9:22	11/26/2019 9:38	16	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/30/2019 6:37	11/30/2019 6:54	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/1/2019 11:47	12/1/2019 11:51	4	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/1/2019 16:33	12/1/2019 16:59	26	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	12/2/2019 10:29	12/2/2019 21:26	657	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/2/2019 10:34	12/2/2019 11:11	37	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/2/2019 13:22	12/2/2019 22:59	577	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/3/2019 13:35	12/3/2019 14:08	33	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/3/2019 14:51	12/3/2019 15:33	42	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/4/2019 1:40	12/4/2019 1:41	1	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/4/2019 9:07	12/4/2019 10:34	87	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/4/2019 9:10	12/4/2019 9:30	20	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	12/4/2019 10:27	12/4/2019 10:58	31	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/7/2019 7:42	12/7/2019 8:12	30	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/7/2019 15:48	12/7/2019 15:59	11	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/8/2019 20:22	12/9/2019 12:42	980	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/10/2019 14:35	12/10/2019 15:56	81	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/11/2019 10:52	12/11/2019 11:54	62	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/11/2019 16:04	12/11/2019 16:24	20	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/11/2019 17:25	12/11/2019 17:40	15	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	12/12/2019 9:22	12/12/2019 9:43	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/12/2019 11:13	12/12/2019 11:50	37	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/12/2019 17:24	12/12/2019 17:45	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/13/2019 7:23	12/13/2019 9:33	130	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/13/2019 8:54	12/13/2019 9:10	16	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/13/2019 11:47	12/14/2019 17:02	1755	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/14/2019 17:12	12/14/2019 17:15	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/14/2019 18:11	12/14/2019 19:48	97	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/14/2019 21:21	12/14/2019 21:23	2	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	12/16/2019 17:50	12/16/2019 17:59	9	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/17/2019 10:45	12/17/2019 11:11	26	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/17/2019 13:29	12/17/2019 13:35	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/18/2019 9:00	12/18/2019 9:03	3	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/18/2019 9:12	12/18/2019 9:30	18	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/18/2019 11:05	12/18/2019 12:09	64	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/20/2019 11:22	12/20/2019 11:28	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/20/2019 11:45	12/20/2019 11:46	1	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	12/23/2019 20:57	12/23/2019 21:12	15	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/27/2019 20:20	12/27/2019 20:33	13	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/28/2019 7:16	12/28/2019 8:21	65	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze

Required by 40 CFR 52.1235(e)(5)

Reporting Period: **July 1 - December 31, 2019**

Company: **Hibbing Taconite Company**
4950 County Highway 5 North
PO Box 589
Hibbing, MN 55746-0589

Periods of Excess Emissions of NO _x and SO ₂						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Days):	Cause:	Corrective Action:
No excess emissions for SO ₂ during this reporting period. NO _x limit not yet effective.						

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze

Required by 40 CFR 52.1235(e)(5)

Reporting Period: **July 1 - December 31, 2019**

Company: **Hibbing Taconite Company**
4950 County Highway 5 North
PO Box 589
Hibbing, MN 55746-0589

Description of Monitor Downtime							
Process Unit/Stack Vent:	Analyzer Analyte:	Analyzer Serial Number:	Event Start Time:	Event End Time:	Duration (Hours):	Cause:	Corrective Action:
Please refer to the Regional Haze Excess Emissions Reports.							

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze
Required by 40 CFR 52.1235(e)(5)

Reporting Period: **July 1 - December 31, 2019**

Company: **Hibbing Taconite Company**
4950 County Highway 5 North
PO Box 589
Hibbing, MN 55746-0589

Recordkeeping & Reporting Deviations						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Days):	40 CFR 52.1235 Requirement:	Cause & Corrective Action:
No deviations from the requirements of 52.1235 in regards to recordkeeping and reporting during the reporting period.						